REMARKS

This responds to the Office Action mailed on <u>November 30, 2006</u>.

No claims are amended, canceled, or are added; as a result, claims 1- 30 remain pending in this application.

Allowable Subject Matter

Claims 6 and 15 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicants appreciate the Examiner's acknowledgement that this application discloses patentable subject matter and that claims 6 and 15 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In view of the arguments presented below, Applicant believes that the rejected base claim is itself patentable, thereby mooting the current objection. Applicant reserves the right to amend claims 6 and 15 by rewriting them in independent form including all of the limitations of the base claim and any intervening claims, if it becomes necessary to do so.

§101 Rejection of the Claims

Claims 16-21 were rejected under 35 USC § 101 as being directed to non-statutory subject matter. Specifically, the Examiner asserts that claim 16, as presently constituted, "…raises a question as to whether the claim is directed merely to an abstract idea which would result in a practical application producing a concrete, useful and tangible result fails to produce a useful concrete and tangible result…". Claims 17 through 21 were consequently rejected as depending from claim 16. Applicant respectfully traverses the rejection on the grounds that the Office Action has failed to meet its burden to show that claims 16 - 21 do not presently recite statutory subject matter.

Because the claimed invention produces a useful, concrete, and tangible result, namely, assembly code for use in a computer, the Applicant respectfully traverses.

The Office Action questions whether the claimed invention produces a tangible result. In response, the Applicant respectfully suggests consideration of the following portion of the guidelines offered by the Office in these matters:

> The claimed invention as a whole must be useful and accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." State Street, 149 F.3d at 1373-74, 47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (Brenner v. Manson, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96 (1966)); In re Fisher, 421 F.3d 1365, 76 USPQ2d 1225 (Fed. Cir. 2005); In re Ziegler, 992 F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)). ... The tangible requirement does not necessarily mean that a claim must either be tied to a particular machine or apparatus or must operate to change articles or materials to a different state or thing. However, the tangible requirement does require that the claim must recite more than a § 101 judicial exception, in that the process claim must set forth a practical application of that § 101 judicial exception to produce a real-world result. Benson, 409 U.S. at 71-72, 175 USPQ at 676-77 (invention ineligible because had "no substantial practical application."). "[A]n application of a law of nature or mathematical formula to a ... process may well be deserving of patent protection." Diehr, 450 U.S. at 187, 209 USPQ at 8 (emphasis added); see also Corning, 56 U.S. (15 How.) at 268, 14 L.Ed. 683 ("It is for the discovery or invention of some practical method or means of producing a beneficial result or effect, that a patent is granted . . ."). *Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility* (hereinafter, the "Guidelines"), pgs. 4, 21-22, October 2005.

In this case, independent claim 16 (and claims 17 through 21 depending from it) recite "an output module to generate assembly code using the modified source code." Generating assembly code using modified source code is indeed practical. Use of assembly code using that modified source code promotes more efficient operation of a computer and thereby is of real-world value. Therefore, according to the Guidelines, not only does the claimed invention produce a result that is useful and concrete - it is also

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tangible. For this reason, the Applicant respectfully requests that the rejection of claims 16-21 under 35 USC § 101 be reconsidered and withdrawn.

§103 Rejection of the Claims

Claims 1, 2, 8, 10, 16, 17, 22, 23, and 27-29 were rejected under 35 USC § 103(a) as being unpatentable over Cao et al. (U.S. 6,367,071) in view of Grantson, "Lexical Functional Grammar: Analysis and Implementation" (May 16, 2002). Reconsideration and withdrawal of the rejection is requested.

Per claims 1, 8 and 16

The Office Action concedes that the cited patent, "Cao does not explicitly disclose by performing a Lexical Functional Grammar Analysis (LGFA) operation.[1]" Applicants take that to be a concession that Cao lacks an explicit disclosure of at least the claim feature of:

> "modifying source code, including multiple instructions, by performing a Lexical Functional Grammar Analysis (LFGA) operation on one or more instructions as a function of a Digital Signal Processor (DSP) architecture;..."

as claim 1 requires. Claims 8 and 16 have analogous language and received the same analysis as claim 1.

The Office Action provides no helpful analysis as to how it proposes to combine the cited Cao and Grantson materials. The only explanation of the rationale proposed in the Office Action to show that it would have been obvious to combine Coe and Grantson is the circular analysis set forth oin the last full paragraph of page 4 of the Office Action. That analysis is faulty in that it proposes

> "an incorporation of the method of using Lexical Functional Grammar Analysis oas taught by Grantson into the method of Lexical Functional Grammar analysis and implementation as taught by Grantson."

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[1] Office Action, page 4, lines 5-6.

The remainder of the explanation[2] also provides no clue as to how the Office Action proposes to combine Grantson with Cao (rather than with Grantson). A rationale for the rejection by combining Grantson with Grantson does not support a rejection combing Cao and Grantson in some manner never specified. Because the Office Action's explanation never even mentions Cao, it is entirely defective in providing a rationale supporting a rejection combining Cao and Grantson. Clearly a mistake was made in explaining the rationale. It is not the duty of Applicants to attempt to divine what this critical portion of the Office Action was actually intended to mean.

The failure of the Office Action to provide even a rationale to support the rejection of Independent claims 1, 8 and 16 means that no *prima facie* showing of obviousness has been made and the rejection was defective and must be withdrawn. Reconsideration and withdrawal of the rejection is respectfully requested.

Per claims 2, 10 and 17

The rejection of these claims incorporated the defective rejection of claim 1 and is defective for the same reasons as the rejection of independent claims 1, 8 and 16 from which claims 2, 10 and 17 respectively depend.

Claims 22 and 23 are computer product claims corresponding to method claims 1 and 2 respectively and received the same defective rejection as those claims.

Claims 27, 28 and 29 are system claims the Office Action asserted to be "corresponding to method claims 1 and 2 respectively" and were rejected under the same faulty rationale that was applied to the rejection of claim 1 above.

Claims 3, 18, and 24 were rejected under 35 USC § 103(a) as being unpatentable over Cao et al. (U.S. 6,367,071) in view of Grantson, "Lexical Functional Grammar:

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[2] Office Action, page 4, final paragraph (in full)
"Therefore, it would have been obvious to a person of ordinary skill in the art at thee time the invention was made to incorporate the method of using Lexical Functional Grammar AAnalysis as taught by Grantson into the method of Lexical Functional Grammar Analysis as taught by Grantson. The modification would be obvious because one of ordinary skill in the art would be motivated to use Lexical Functional Granmmar because the Lexical Functional Grammar formalism provides a set of devices for describing the common properties of all human languages as suggested by Grantson (see Abstract)."

Analysis and Implementation" (May 16, 2002) further in view of Karttunen et al.

Reconsideration and withdrawal of the rejection is requested.

Per claims 3 and 18

The rejection of these claims incorporated the defective rejection of claim 2 (which was in turn based upon the defective rejection of claim 1) and is defective for the same reasons as the rejection of independent claim 1. Claim 18 was not specifically analyzed in the Office Action but it was dependent upon claim 17 which depends from claim 16 which was rejected using the faulty analysis used to reject claim 1.

Per claim 24

Claim 24 was rejected as a "computer product claim corresponding to method claim 3, and rejected under the same rationale set forth in connection of claim 3." As pointed out above, the rejection of claim 3 incorporated the rejection of claim 2 which was based upon the faulty rejection of claim 1.

Claims 4, 5, 7, 9, 11-14, 19-21, 25, 26, and 30 were rejected under 35 USC § 103(a) as being unpatentable over Cao et al. (U.S. 6,367,071) in view of Grantson, "Lexical Functional Grammar: Analysis and Implementation" (May 16, 2002) and further in view of Applicant's Admitted Prior Art. Reconsideration and withdrawal of the rejection is requested.

Per claims 4, 11 and 19

The rejection of claims 4, 11 and 19 incorporated the rejection of claim 3 which in turn was based upon the rejection of claim 2 and the faulty rejection of claim 1.

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Per claims 5, 9 and 20

The rejection of claims 5, 9 and 20 incorporates the faulty rationale of the rejection of claim 4 which in turn was premised on the faulty rationale rejecting claims 3, 2 and, ultimately, the defective rejection of claim 1.

Per claims 7 and 12

The rejection of claims 7 and 12 incorporated the rejection of claim 4 which, in turn was based upon the faulty rejections of claims 3, 2, and ultimately on the defective trejection of claim 1.

Per claim 13

The rejection of claim 13 relied upon a combination of methods including "the combination system of Cao and Grantson" [3] As explained above, a combination of Cao and Grantson was relied upon in the rejection of claim 1 and all claims dependent from it – but, as explained relative to the rejection of claim 1, was never described in more detail beyond referring to an unspecified combination of Cao and Grantson. The rejection of claim 13 is defective since it fails to make a *prima facie* showing of obviousness.

Per claim 14

The rejection of claim 14 incorporates the defective rejection of claim 13 and is therefore also defective.

Per claim 21

The rejection of claim 21 incorporates the rejection of claim 20 and other dependent claims back to claim 16. The rejection of claim 16shared the same defects as the rejection of claim 1 so that the rejection of claim 21 is also defective.

Per claims 25 and 26

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[3] Office Action page 11, lines 6-7.

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The rejection of claims 25 and 26 treated them as "computer product claims dependent upon method claims 4 and 7 respectively, and rejected [them] under the same rationale set forth in connection with the rejection of claims 4 and 7 respectively, above." Since the rejections of claims 4 and 7 all relied upon the defective combination of Cao and Grantson as discussed above relative to claim 1, the rejection of claims 25 and 26 is also defective.

Per claim 30

The rejection of claim 30 treated it as "a computer system claim corresponding to method claim 4 and rejected [it] under the same rationale set forth in connection with the rejection of claims 4, above." Since the rejection of claim 4 relied upon the defective combination of Cao and Grantson as discussed above relative to claim 1, the rejection of claim 30 is also defective.

Reservation of Rights

In the interest of clarity and brevity, Applicant may not have addressed every assertion made in the Office Action. Applicant's silence regarding any such assertion does not constitute any admission or acquiescence. Applicant reserves all rights not exercised in connection with this response, such as the right to challenge or rebut any tacit or explicit characterization of any reference or of any of the present claims, the right to challenge or rebut any asserted factual or legal basis of any of the rejections, the right to swear behind any cited reference such as provided under 37 C.F.R. § 1.131 or otherwise, or the right to assert co-ownership of any cited reference. Applicant does not admit that any of the cited references or any other references of record are relevant to the present claims, or that they constitute prior art. To the extent that any rejection or assertion is based upon the Examiner's personal knowledge, rather than any objective evidence of record as manifested by a cited prior art reference, Applicant timely objects to such reliance on Official Notice, and reserves all rights to request that the Examiner provide a reference or affidavit in support of such assertion, as required by MPEP § 2144.03. Applicant reserves all rights to pursue any cancelled claims in a subsequent patent application claiming the benefit of priority of the present patent application, and to request rejoinder of any withdrawn claim, as required by MPEP § 821.04.

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Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney ((612) 373-6970) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.
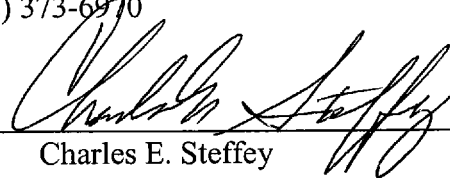
Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexendria, VA 22313-1450 on this 5th day of July 2007.

_____ Amy Moriarty _____   _____
Name   Signature